

~~19~~
~~43.~~ (New) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim ~~23~~ into a vector.

~~20~~
~~44.~~ (New) A vector comprising the polynucleotide of claim ~~23~~.

~~21~~
~~45.~~ (New) The vector of claim ~~44~~, wherein said polynucleotide is operably associated with a heterologous regulatory sequence.

~~22~~
~~46.~~ (New) *An isolated* ~~A~~ host cell comprising the polynucleotide of claim ~~23~~, operatively associated with a heterologous regulatory sequence.

~~23~~
~~47.~~ (New) A method for producing a protein, comprising:
(a) culturing a host cell under conditions suitable to produce a polypeptide encoded by the polynucleotide of claim ~~23~~; and
(b) recovering the protein.

~~24~~
~~48.~~ (New) A composition comprising the polynucleotide of claim ~~23~~.

Remarks

Claims 17, 19, and 23-48 will be pending upon entry of this amendment. Claims 1-16, 18, and 20-22 have been canceled and new claims 23-48 have been added in order to more particularly point out and distinctly claim the subject matter Applicants regard as the invention. Applicants submit that the subject matter of new claims 23-48 falls within the scope of Group I, as defined by the Examiner in the Office Action dated July 19, 1999. New claims 23-48 find support in the claims as originally filed and throughout the specification. Thus, no new matter has been introduced.

I. Amendment of the Specification.

The specification has been amended to perfect the claim to priority under 35 U.S.C. § 119(e) and to correct an obvious typographical error. 5x SSC is a well-known solution used in hybridization solutions. (*See, e.g.,* Exhibit A, CURRENT PROTOCOLS IN MOLECULAR BIOLOGY, John Wiley and Sons, N.Y., at page 2.10.7 (1989).) SSC is normally made as a 20x stock solution, and then diluted accordingly for a particular use. Exhibit B shows that a 20x SSC stock solution contains 3 M NaCl and 0.3 M trisodium citrate. (*See, e.g.,* Exhibit B, CURRENT PROTOCOLS, at page A.2.5.) To make a 5x SSC solution, the 20x solution must be diluted by a factor of four. Therefore, a 5x SSC solution contains 750 mM NaCl ($3\text{ M} \div 4 = 750\text{ mM}$) and 75 mM trisodium citrate ($0.3\text{ M} \div 4 = 75\text{ mM}$). One skilled in the art would have immediately recognized that the amount of ingredients listed in the specification for a 5x SSC solution was incorrect. Rather than describing a 5x SSC solution, made up of 750 mM NaCl and 75 mM trisodium citrate, the specification inaccurately listed the ingredient amounts for a 1x solution. The skilled artisan, in recognizing the typographical error, could have easily adjusted the amount of ingredients described in the specification to properly make a 5x SSC solution.

Therefore, because no new matter will be added to the specification if these typographical errors are corrected, Applicants respectfully request that the amendments to the specification to recite the correct ingredient amounts in 5x SSC be entered.

II. Amendment of the Claims.

Claims 1-16, 18, and 20-22 have been canceled in favor of new claims 23-48 in order to more particularly point out and distinctly claim the subject matter Applicants regard as the invention. New claims 23-48 find support in the claims as originally filed and throughout the specification. Thus, no new matter has been introduced.

Particularly, support for new independent claim 23 and new dependent claims 24-40 is found, for example, at page 2, line 36 through page 3, line 27; at page 11, lines 31-33; and at page 23, lines 14-18. Support for new dependent claims 41-47 is found, for example, at page

20, line 7 through page 22, line 8. Support for new dependent claim 48 is found, for example, at page 42, line 38 through page 43, line 5.

Thus, no new matter has been added by way of amendment. Entry of the above amendment is therefore respectfully solicited.

III. The Restriction Requirement.

The Examiner has required an election under 35 U.S.C. § 121 of one of Groups I-III. In response, Applicants provisionally elect, *with traverse*, Group I represented by claims 1-16, 20, 22, and newly added claims 23-48 for further prosecution. Applicants reserve the right to file one or more divisional applications directed to non-elected inventions should the restriction requirement be made final.

Applicants respectfully request that the Examiner enter the following amendments prior to examination of the captioned application.

Applicants respectfully traverse the restriction requirement as it applies to Groups I-III. As the Examiner points out, polynucleotides, polypeptides, and antibodies are patentably distinct inventions. However, even where two patentably distinct inventions appear in a single application, restriction remains improper unless it can be shown that the search and examination of both groups would entail a "serious burden". *See*, M.P.E.P. § 803. In the present situation, no such showing has been made. Indeed, no arguments have been made explaining why it would impose an undue burden to examine Groups I-III together.

Applicants submit that a search of the polynucleotide claims would provide useful information for Groups II and III. For example, in many if not most publications, where a published nucleotide sequence contains an open reading frame, the authors also routinely include polypeptides and antibodies. Thus, the searches for polynucleotides, polypeptides, and antibodies commonly overlap. Thus, the search and examination of a polynucleotide, its corresponding deduced polypeptide sequence, and corresponding antibodies would not entail a serious burden. Thus, the searches for Groups I-III would be overlapping.

Accordingly, as applied to Groups I-III, the restriction requirement should be withdrawn.

IV. *Substitute Sequence Listing.*

Applicants submit herewith a Substitute Sequence Listing in both paper and computer readable forms. Applicants respectfully request that the originally filed Sequence Listing be canceled and the Substitute Sequence Listing submitted herewith be appended to the instant application as directed above.

V. Conclusion.

In view of the foregoing remarks, applicants believe that this application is now in condition for allowance. An early notice to that effect is urged. The Examiner is invited to call the undersigned at the phone number provided below if any further action by applicant would expedite the examination of this application.

Finally, if there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

Dated: 9/20/99


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Enclosures
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